5

10

ABSTRACT

A channel search algorithm is provided for application at a receiving end of a data transmission channel. In the operation of the data transmission channel, information is transmitted by modulation of an RF carrier and the modulation includes an encoding of information bits by symbols selected from a known symbol constellation, with one or more symbol constellations being established in accordance with a known standard. The channel search algorithm is operative to recognize and select a channel carrying an information signal modulated by a symbol constellation other than that established by the standard, and that selection of a channel using a non-standard symbol constellation is made in seamless coordination with the operation of a channel search, in accordance with the standard, for signals modulated by symbol constellations established by the standard.